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NEWS 5 FEB 05 German (DE) application and patent publication number format  
changes  
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NEWS 7 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 8 MAR 03 FRANCEPAT now available on STN  
NEWS 9 MAR 29 Pharmaceutical Substances (PS) now available on STN  
NEWS 10 MAR 29 WPIFV now available on STN  
NEWS 11 MAR 29 New monthly current-awareness alert (SDI) frequency in RAPRA  
NEWS 12 APR 26 PROMT: New display field available  
NEWS 13 APR 26 IFIPAT/IFIUDB/IFICDB: New super search and display field  
available  
NEWS 14 APR 26 LITAlert now available on STN  
NEWS 15 APR 27 NLDB: New search and display fields available  
NEWS 16 May 10 PROUSDDR now available on STN  
NEWS 17 May 19 PROUSDDR: One FREE connect hour, per account, in both May  
and June 2004  
NEWS 18 May 12 EXTEND option available in structure searching  
NEWS 19 May 12 Polymer links for the POLYLINK command completed in REGISTRY  
NEWS 20 May 17 FRFULL now available on STN  
  
NEWS EXPRESS MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004  
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=> s implant? and scaffold?  
 L1 7410 IMPLANT? AND SCAFFOLD?

=> s l1 and porous  
 L2 2939 L1 AND POROUS

=> s l2 and biodegradable  
 L3 1478 L2 AND BIODEGRADABLE

=> s l3 and (continuous or interconnect?) and pores  
 L4 490 L3 AND (CONTINUOUS OR INTERCONNECT?) AND PORES

=> s l4 and (discrete or coextensive or (co continuous) or immiscible or incompatible)  
 L5 154 L4 AND (DISCRETE OR COEXTENSIVE OR (CO CONTINUOUS) OR IMMISCIBLE OR INCOMPATIBLE)

=> s l5 and interconnect?  
 L6 103 L5 AND INTERCONNECT?

=> s l6 and (partial? interconnect?)  
 L7 1 L6 AND (PARTIAL? INTERCONNECT?)

=> d l7 1

L7 ANSWER 1 OF 1 USPATFULL on STN  
 AN 2003:105879 USPATFULL  
 TI **Biodegradable porous** devices for tissue engineering  
 IN Tsai, Chin-Chin, Taichung Hsien, TAIWAN, PROVINCE OF CHINA  
 Shih, Hsi-Hsin, Taichung, TAIWAN, PROVINCE OF CHINA  
 Lai, Huey-Min, Hsinchu, TAIWAN, PROVINCE OF CHINA  
 PA Industrial Technology Research Institute, Hsinchu, TAIWAN, PROVINCE OF CHINA (non-U.S. corporation)  
 PI US 2003072790 A1 20030417  
 AI US 2001-982565 A1 20011016 (9)  
 DT Utility  
 FS APPLICATION

LN.CNT 343  
INCL INCLM: 424/443.000  
INCLS: 442/334.000  
NCL NCLM: 424/443.000  
NCLS: 442/334.000  
IC [7]  
ICM: A61K009-70  
ICS: D04H013-00  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> s 16 and fiber and polymer  
L8 51 L6 AND FIBER AND POLYMER

=> s 18 and (degradation or biodegradation) (w) rate  
L9 9 L8 AND (DEGRADATION OR BIODEGRADATION) (W) RATE

=> d 19 1-9 ibib abs

L9 ANSWER 1 OF 9 USPATFULL on STN  
ACCESSION NUMBER: 2003:250624 USPATFULL  
TITLE: Method and apparatus for preparing biomimetic  
**scaffold**  
INVENTOR(S): Campbell, Phil G., Pittsburgh, PA, UNITED STATES  
Weiss, Lee E., Pittsburgh, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003175410	A1	20030918
APPLICATION INFO.:	US 2003-391458	A1	20030318 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-365451P	20020318 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BLVD, BOSTON, MA, 02110	
NUMBER OF CLAIMS:	115	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	15 Drawing Page(s)	
LINE COUNT:	3292	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods, compositions, and apparatus for preparing biomimetic  
**scaffolds** are provided. The methods, compositions, and apparatus  
are compatible with both in situ and external **scaffold**  
preparation. Also provided are methods for preparing **scaffolds**  
having 3-D spatial and/or temporal gradients of therapeutic compounds,  
such as, growth factors, antibiotics, immunosuppressants, analgesics,  
etc.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 2 OF 9 USPATFULL on STN  
ACCESSION NUMBER: 2003:167076 USPATFULL  
TITLE: Complex three-dimensional composite **scaffold**  
resistant to delamination  
INVENTOR(S): Sherwood, Jill K., Edison, NJ, UNITED STATES  
Monkhouse, Donald, Radnor, PA, UNITED STATES  
Gaylo, Christopher M., Princeton Junction, NJ, UNITED  
STATES  
PATENT ASSIGNEE(S): Therics, Inc. (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 2003114936 A1 20030619  
 APPLICATION INFO.: US 2002-207531 A1 20020729 (10)  
 RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-416346, filed  
 on 12 Oct 1999, GRANTED, Pat. No. US 6454811

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-103853P	19981012 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	PATREA L. PABST, HOLLAND & KNIGHT LLP, SUITE 2000, ONE ATLANTIC CENTER, 1201 WEST PEACHTREE STREET, N.E., ATLANTA, GA, 30309-3400	
NUMBER OF CLAIMS:	41	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Page(s)	
LINE COUNT:	2846	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The devices disclosed herein are composite **implantable** devices  
 having a gradient of one or more of the following: materials,  
 macroarchitecture, microarchitecture, or mechanical properties, which  
 can be used to select or promote attachment of specific cell types on  
 and in the devices prior to and/or after **implantation**. In  
 preferred embodiments, the **implants** include complex  
 three-dimensional structure, including curved regions and saddle-shaped  
 areas. In various embodiments, the gradient forms a transition zone in  
 the device from a region composed of materials or having properties best  
 suited for one type of tissue to a region composed of materials or  
 having properties suited for a different type of tissue. Methods to  
 improve these devices for use in repair or replacement of cartilage  
 and/or bone have been developed, which specifically address 1) the  
 selection of the appropriate polymeric material for the cartilage  
 region, 2) mechanical testing of the bone region including the effect of  
 porosity and **polymer**/calcium phosphate ratio, and 3)  
 prevention of delamination in the transition region.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 3 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2003:147077 USPATFULL  
 TITLE: Architecture tool and methods of use  
 INVENTOR(S): Warren, William L., Stillwater, OK, UNITED STATES  
 Parkhill, Robert L., Stillwater, OK, UNITED STATES  
 Stewart, Robert L., Stillwater, OK, UNITED STATES  
 Kachurin, Anatoly M., Stillwater, OK, UNITED STATES  
 Taylor, Robert M., Perkins, OK, UNITED STATES  
 Hargrave, Brian H., Stillwater, OK, UNITED STATES  
 Church, Kenneth H., Stillwater, OK, UNITED STATES  
 Nguyen, Michael N., Stillwater, OK, UNITED STATES  
 Kargel, Mark L., Stillwater, OK, UNITED STATES  
 Simpkins, Mark W., Stillwater, OK, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003100824	A1	20030529
APPLICATION INFO.:	US 2002-227146	A1	20020823 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-314344P	20010823 (60)
	US 2001-337378P	20011204 (60)
	US 2001-337383P	20011204 (60)
	US 2001-340706P	20011211 (60)

DOCUMENT TYPE: Utility  
 FILE SEGMENT: APPLICATION  
 LEGAL REPRESENTATIVE: NEEDLE & ROSENBERG P C, 127 PEACHTREE STREET N E,  
 ATLANTA, GA, 30303-1811  
 NUMBER OF CLAIMS: 162  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 30 Drawing Page(s)  
 LINE COUNT: 5171  
 AB The invention provides an apparatus and methods for depositing materials on a substrate, and for performing other selected functions, such as material destruction and removal, temperature control, imaging, detection, therapy and positional and locational control. In various embodiments, the apparatus and methods are suitable for use in a tabletop setting, in vitro or in vivo.

L9 ANSWER 4 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2003:112581 USPATFULL  
 TITLE: Foam composite for the repair or regeneration of tissue  
 INVENTOR(S): Vyakarnam, Murty N., New York, NY, UNITED STATES  
 Zimmerman, Mark C., East Brunswick, NJ, UNITED STATES  
 Scopelianos, Angelo George, Whitehouse Station, NJ, UNITED STATES  
 Chun, Iksoo, Flemington, NJ, UNITED STATES  
 Melican, Mora C., Bridgewater, NJ, UNITED STATES  
 Bazilio, Clairene A., Plainfield, NJ, UNITED STATES  
 Roller, Mark B., North Brunswick, NJ, UNITED STATES  
 Gorky, David V., Flemington, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003077311	A1	20030424
APPLICATION INFO.:	US 2001-938364	A1	20010824 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1999-469118, filed on 21 Dec 1999, GRANTED, Pat. No. US 6306424 Continuation-in-part of Ser. No. US 1999-345096, filed on 30 Jun 1999, GRANTED, Pat. No. US 6333029		

DOCUMENT TYPE: Utility  
 FILE SEGMENT: APPLICATION  
 LEGAL REPRESENTATIVE: AUDLEY A. CIAMPORCERO JR., JOHNSON & JOHNSON, ONE  
 JOHNSON & JOHNSON PLAZA, NEW BRUNSWICK, NJ, 08933-7003  
 NUMBER OF CLAIMS: 61  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 15 Drawing Page(s)  
 LINE COUNT: 2270

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present patent describes a biocompatible composite made of a first fibrous layer attached to a three-dimensional inter-connected open cell **porous** foams that have a gradient in composition and/or microstructure through one or more directions. These composites can be made from blends of absorbable and biocompatible polymers. These biocompatible composites are particularly well suited to tissue engineering applications and can be designed to mimic tissue transition or interface zones.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 5 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2003:105879 USPATFULL  
 TITLE: **Biodegradable porous** devices for tissue engineering  
 INVENTOR(S): Tsai, Chin-Chin, Taichung Hsien, TAIWAN, PROVINCE OF CHINA  
 Shih, Hsi-Hsin, Taichung, TAIWAN, PROVINCE OF CHINA

EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 36 Drawing Figure(s); 19 Drawing Page(s)  
LINE COUNT: 2094

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Matrices that include a macrostructure having a semi-solid network and voids, and a microstructure having voids, in which the microstructure is located within the semi-solid network are disclosed. Methods for preparing these matrices are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 7 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2002:251753 USPATFULL

TITLE: Regulated growth factor delivery for engineered peripheral nerve

INVENTOR(S): Evans, Gregory R.D., Tustin, CA, UNITED STATES  
Patrick, Charles W., JR., Houston, TX, UNITED STATES  
Schmidt, Mathias, Konstanz, GERMANY, FEDERAL REPUBLIC OF  
OF  
Fan, Zhen, Houston, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002137706	A1	20020926
APPLICATION INFO.:	US 2001-910681	A1	20010720 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-220086P	20000721 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FULBRIGHT & JAWORSKI L.L.P., A REGISTERED LIMITED LIABILITY PARTNERSHIP, SUITE 2400, 600 CONGRESS AVENUE, AUSTIN, TX, 78701	
NUMBER OF CLAIMS:	46	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	8 Drawing Page(s)	
LINE COUNT:	2960	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to compositions and methods for the stimulation of nerve cell growth and the regeneration of nerve tissue. Using engineered "helper" cells and nerve growth conduits, in vivo stimulation of nerve cell growth, for example, in damaged or diseased tissues, is achieved.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 8 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2001:184869 USPATFULL

TITLE: Foam composite for the repair or regeneration of tissue

INVENTOR(S): Vyakarnam, Murty N., New York, NY, United States  
Zimmerman, Mark C., East Brunswick, NJ, United States  
Scopelianos, Angelo George, Whitehouse Station, NJ, United States  
Chun, Iksoo, Flemington, NJ, United States  
Melican, Mora C., Bridgewater, NJ, United States  
Bazilio, Clairene A., Plainfield, NJ, United States  
Roller, Mark B., North Brunswick, NJ, United States  
Gorky, David V., Flemington, NJ, United States  
PATENT ASSIGNEE(S): Ethicon, Inc., Somerville, NJ, United States (U.S. corporation)

NUMBER	KIND	DATE
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'OFFENLEGUNGS' DATE: 20020828  
APPLICATION INFO.: EP 2001-301703 20010226

=> d his

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FILE 'CAPLUS, USPATFULL, JAPIO, EUROPATFULL, MEDLINE, BIOSIS, EMBASE'  
ENTERED AT 17:17:15 ON 20 MAY 2004

L1 7410 S IMPLANT? AND SCAFFOLD?  
L2 2939 S L1 AND POROUS  
L3 1478 S L2 AND BIODEGRADABLE  
L4 490 S L3 AND (CONTINUOUS OR INTERCONNECT?) AND PORES  
L5 154 S L4 AND (DISCRETE OR COEXTENSIVE OR (CO CONTINUOUS) OR IMMISC  
L6 103 S L5 AND INTERCONNECT?  
L7 1 S L6 AND (PARTIAL? INTERCONNECT?)  
L8 51 S L6 AND FIBER AND POLYMER  
L9 9 S L8 AND (DEGRADATION OR BIODEGRADATION) (W) RATE

=> s l8 and porosity

L10 48 L8 AND POROSITY

=> s l10 and (pore diameter)

L11 20 L10 AND (PORE DIAMETER)

=> s l11 and gelatin and collagen

L12 13 L11 AND GELATIN AND COLLAGEN

=> d l12 1-13 ibib abs

L12 ANSWER 1 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2004:50387 USPATFULL

TITLE: Electroprocessed collagen and tissue  
engineering

INVENTOR(S): Simpson, David G., Mechanicsville, VA, UNITED STATES  
Bowlin, Gary L., Mechanicsville, VA, UNITED STATES  
Wnek, Gary E., Midlothian, VA, UNITED STATES  
Stevens, Peter J., Richland Hills, TX, UNITED STATES  
Carr, Marcus E., Midlothian, VA, UNITED STATES  
Matthews, Jamil A., Glen Allen, VA, UNITED STATES  
Rajendran, Saravanamoorthy, East Haven, CT, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004037813	A1	20040226
APPLICATION INFO.:	US 2003-447670	A1	20030528 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-991373, filed on 16 Nov 2001, PENDING Continuation-in-part of Ser. No. US 2000-714255, filed on 17 Nov 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-512081, filed on 24 Feb 2000, ABANDONED Continuation-in-part of Ser. No. US 1999-386273, filed on 31 Aug 1999, GRANTED, Pat. No. US 6592623		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-121628P	19990225 (60)
	US 2002-384035P	20020528 (60)
	US 2002-386612P	20020606 (60)
	US 2002-396399P	20020715 (60)
	US 2002-402189P	20020808 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: JOHN S. PRATT, ESQ, KILPATRICK STOCKTON, LLP, 1100  
PEACHTREE STREET, SUITE 2800, ATLANTA, GA, 30309  
NUMBER OF CLAIMS: 17  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 14 Drawing Page(s)  
LINE COUNT: 5697

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention is directed to formation and use of electroprocessed **collagen**, including use as an extracellular matrix and, together with cells, its use in forming engineered tissue. The engineered tissue can include the synthetic manufacture of specific organs or tissues which may be **implanted** into a recipient. The electroprocessed **collagen** may also be combined with other molecules in order to deliver substances to the site of application or **implantation** of the electroprocessed **collagen**. The **collagen** or **collagen**/cell suspension is electrodeposited onto a substrate to form tissues and organs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 2 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2003:250624 USPATFULL  
TITLE: Method and apparatus for preparing biomimetic **scaffold**  
INVENTOR(S): Campbell, Phil G., Pittsburgh, PA, UNITED STATES  
Weiss, Lee E., Pittsburgh, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003175410	A1	20030918
APPLICATION INFO.:	US 2003-391458	A1	20030318 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-365451P	20020318 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BLVD, BOSTON, MA, 02110	
NUMBER OF CLAIMS:	115	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	15 Drawing Page(s)	
LINE COUNT:	3292	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods, compositions, and apparatus for preparing biomimetic **scaffolds** are provided. The methods, compositions, and apparatus are compatible with both in situ and external **scaffold** preparation. Also provided are methods for preparing **scaffolds** having 3-D spatial and/or temporal gradients of therapeutic compounds, such as, growth factors, antibiotics, immunosuppressants, analgesics, etc.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 3 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2003:167076 USPATFULL  
TITLE: Complex three-dimensional composite **scaffold** resistant to delamination  
INVENTOR(S): Sherwood, Jill K., Edison, NJ, UNITED STATES  
Monkhouse, Donald, Radnor, PA, UNITED STATES  
Gaylo, Christopher M., Princeton Junction, NJ, UNITED STATES  
PATENT ASSIGNEE(S): Therics, Inc. (U.S. corporation)



AB Composite devices for tissue engineering are provided having a gradient of one or more of the following: materials, macroarchitecture, microarchitecture, or mechanical properties, which can be used to select or promote attachment of specific cell types on and in the devices prior to and/or after **implantation**. In various embodiments, the gradient forms a transition zone in the device from a region composed of materials or having properties best suited for one type of tissue to a region composed of materials or having properties suited for a different type of tissue. The devices are made in a **continuous** process that imparts structural integrity as well as a unique gradient of materials in the architecture. The gradient may relate to the materials, the macroarchitecture, the microarchitecture, the mechanical properties of the device, or several of these together. The devices disclosed herein typically are made using solid free form processes, especially three-dimensional printing process (3DP.TM.). The device can be manufactured in a single **continuous** process such that the transition from one form of tissue regeneration **scaffold** and the other form of tissue regeneration **scaffold** have no "seams" and are not subject to differential swelling along an axis once the device is **implanted** into physiological fluid.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 8 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2002:171976 USPATFULL  
TITLE: Electroprocessed **collagen**  
INVENTOR(S): Simpson, David G., Mechanicsville, VA, UNITED STATES  
Bowlin, Gary L., Mechanicsville, VA, UNITED STATES  
Wnek, Gary E., Midlothian, VA, UNITED STATES  
Stevens, Peter J., N. Richland Hills, TX, UNITED STATES  
Carr, Marcus E., Midlothian, VA, UNITED STATES  
Matthews, Jamil A., Glen Allen, VA, UNITED STATES  
Rajendran, Saravanamoorthy, Branford, CT, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002090725	A1	20020711
APPLICATION INFO.:	US 2001-991373	A1	20011116 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-714255, filed on 17 Nov 2000, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-270118P	20010222 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	JOHN S. PRATT, ESQ, KILPATRICK STOCKTON, LLP, 1100 PEACHTREE STREET, SUITE 2800, ATLANTA, GA, 30309	
NUMBER OF CLAIMS:	24	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Page(s)	
LINE COUNT:	4536	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention is directed to formation and use of electroprocessed **collagen**, including use as an extracellular matrix and, together with cells, its use in forming engineered tissue. The engineered tissue can include the synthetic manufacture of specific organs or tissues which may be **implanted** into a recipient. The electroprocessed **collagen** may also be combined with other molecules in order to deliver substances to the site of application or **implantation** of the electroprocessed **collagen**. The **collagen** or **collagen**/cell suspension is electrodeposited onto a substrate to form tissues and organs.

LINE COUNT: 2320

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present patent describes a three-dimensional **interconnected** open cell **porous** foams that have a gradient in composition and/or microstructure through one or more directions. These foams can be made from a blend of absorbable and biocompatible polymers that are formed into foams having a compositional gradient transitioning from predominately one polymeric material to predominately a second polymeric material. These gradient foams are particularly well suited to tissue engineering applications and can be designed to mimic tissue transition or interface zones.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 11 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2001:184869 USPATFULL

TITLE: Foam composite for the repair or regeneration of tissue

INVENTOR(S): Vyakarnam, Murty N., New York, NY, United States  
Zimmerman, Mark C., East Brunswick, NJ, United States  
Scopelianos, Angelo George, Whitehouse Station, NJ, United States

Chun, Iksoo, Flemington, NJ, United States

Melican, Mora C., Bridgewater, NJ, United States

Bazilio, Clairene A., Plainfield, NJ, United States

Roller, Mark B., North Brunswick, NJ, United States

Gorky, David V., Flemington, NJ, United States

PATENT ASSIGNEE(S): Ethicon, Inc., Somerville, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
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PATENT INFORMATION:	US 6306424	B1	20011023
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APPLICATION INFO.:	US 1999-469118		19991221 (9)
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RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1999-345096, filed on 30 Jun 1999		
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DOCUMENT TYPE:	Utility		
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FILE SEGMENT:	GRANTED		
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PRIMARY EXAMINER:	Acquah, Samuel A.		
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NUMBER OF CLAIMS:	39		
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EXEMPLARY CLAIM:	1		
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NUMBER OF DRAWINGS:	17 Drawing Figure(s); 15 Drawing Page(s)		
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LINE COUNT:	2151		
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CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present patent describes a biocompatible composite made of a first fibrous layer attached to a three-dimensional inter-connected open cell **porous** foams that have a gradient in composition and/or microstructure through one or more directions. These composites can be made from blends of absorbable and biocompatible polymers. These biocompatible composites are particularly well suited to tissue engineering applications and can be designed to mimic tissue transition or interface zones.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 12 OF 13 EUROPATFULL COPYRIGHT 2004 WILA on STN

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 1234587 EUROPATFULL EW 200235 FS OS

TITLE: Biocompatible foam composite.  
Biovertraeglicher Verbundschäum.  
Mousse composite biocompatible.

INVENTOR(S): Vyakarnam, Murty N., 529 West 111th St. Apt. 42, NY 10025, US;

Zimmerman, Mark C., 21 Agate Road, East Brunswick, NJ  
08816, US;  
Scopelianos, Angelo George, 7 John Stevens Rd.,  
Whitehouse Station, NJ 08889, US;  
Melican, Mora C., 2701 Johnson Circle, Bridgewater, NJ  
08807, US;  
Bazilio, Clairene A., 82 Deborah Court, Plainfield, NJ  
07062, US;  
Roller, Mark B., 9 Quince Place, North Brunswick, NJ  
08902, US;  
Gorky, David V., 18 Copper Penny Rd., Flemington, NJ  
08822, US;  
Chun, Iksoo, 253 Spruce Court, Flemington, NJ 08822, US  
ETHICON, INC., U.S. Route 22, Somerville New Jersey  
08876, US

PATENT ASSIGNEE(S):

PATENT ASSIGNEE NO:

AGENT:

AGENT NUMBER:

OTHER SOURCE:

SOURCE:

DOCUMENT TYPE:

LANGUAGE:

DESIGNATED STATES:

PATENT INFO.PUB.TYPE:

PATENT INFORMATION:

291330  
Mercer, Christopher Paul et al., Carpmaels & Ransford  
43, Bloomsbury Square, London WC1A 2RA, GB  
46611  
BEPA2002072 EP 1234587 A1 0048  
Wila-EPZ-2002-H35-T1b  
Patent  
Anmeldung in Englisch; Veroeffentlichung in Englisch  
R AT; R BE; R CH; R CY; R DE; R DK; R ES; R FI; R FR; R  
GB; R GR; R IE; R IT; R LI; R LU; R MC; R NL; R PT; R  
SE; R TR; R AL; R LT; R LV; R MK; R RO; R SI  
EPA1 EUROPAEISCHE PATENTANMELDUNG

PATENT NO	KIND	DATE
EP 1234587	A1	20020828
		20020828
EP 2001-301703		20010226

'OFFENLEGUNGS' DATE:

APPLICATION INFO.:

L12 ANSWER 13 OF 13 EUROPATFULL COPYRIGHT 2004 WILA on STN

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER:

TITLE:

1064958 EUROPATFULL EW 200101 FS OS  
**Porous tissue scaffoldings** for the  
repair or regeneration of tissue.  
Poroeses Stuetzgewebe zur Gewebewiederherstellung oder  
-regeneration.  
Matières pour l'échafaudage tissulaires poreux et la  
reparation ou regeneration de tissu.

INVENTOR(S):

Vyakarnam, Murty N., 2420 Forest Haven Blvd., Edison, NJ  
08817, US;  
Zimmerman, Mark C., 21 Agate Road, East Brunswick, NJ  
08816, US;  
Scopelianos, Angelo George, 7 John Stevens Road,  
Whitehouse Station, NJ 08889, US;  
Roller, Mark B., 9 Quince Place, North Brunswick, NJ  
08902, US;  
Gorky, David V., 18 Copper Penny Road, Flemington, NJ  
08822, US  
ETHICON, INC., U.S. Route 22 West, Somerville, N J  
08876, US

PATENT ASSIGNEE(S):

PATENT ASSIGNEE NO:

AGENT:

AGENT NUMBER:

OTHER SOURCE:

SOURCE:

DOCUMENT TYPE:

291335  
Mercer, Christopher Paul, Carpmaels & Ransford 43,  
Bloomsbury Square, London WC1A 2RA, GB  
46611  
BEPA2001002 EP 1064958 A1 0039  
Wila-EPZ-2001-H01-T1b  
Patent

LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch  
 DESIGNATED STATES: R AT; R BE; R CH; R CY; R DE; R DK; R ES; R FI; R FR; R GB; R GR; R IE; R IT; R LI; R LU; R MC; R NL; R PT; R SE; R AL; R LT; R LV; R MK; R RO; R SI  
 PATENT INFO.PUB.TYPE: EPA1 EUROPÄISCHE PATENTANMELDUNG  
 PATENT INFORMATION:

	PATENT NO	KIND	DATE
	EP 1064958	A1	20010103
'OFFENLEGUNGS' DATE:			20010103
APPLICATION INFO.:	EP 2000-305501		20000630
PRIORITY APPLN. INFO.:	US 1999-345096		19990630
	US 1999-469118		19991221

=> d his

(FILE 'HOME' ENTERED AT 17:15:57 ON 20 MAY 2004)

FILE 'CAPLUS, USPATFULL, JAPIO, EUROPATFULL, MEDLINE, BIOSIS, EMBASE'  
 ENTERED AT 17:17:15 ON 20 MAY 2004

L1 7410 S IMPLANT? AND SCAFFOLD?  
 L2 2939 S L1 AND POROUS  
 L3 1478 S L2 AND BIODEGRADABLE  
 L4 490 S L3 AND (CONTINUOUS OR INTERCONNECT?) AND PORES  
 L5 154 S L4 AND (DISCRETE OR COEXTENSIVE OR (CO CONTINUOUS) OR IMMISC  
 L6 103 S L5 AND INTERCONNECT?  
 L7 1 S L6 AND (PARTIAL? INTERCONNECT?)  
 L8 51 S L6 AND FIBER AND POLYMER  
 L9 9 S L8 AND (DEGRADATION OR BIODEGRADATION) (W) RATE  
 L10 48 S L8 AND POROSITY  
 L11 20 S L10 AND (PORE DIAMETER)  
 L12 13 S L11 AND GELATIN AND COLLAGEN

=> s l8 and (PVA or (polyvinyl alcohol) or polyglycol? or PGA or polylact? or PLA or PLGA or poly(w) (glycol? co lact?) or polycaprolact?)

L13 47 L8 AND (PVA OR (POLYVINYL ALCOHOL) OR POLYGLYCOL? OR PGA OR POLYLACT? OR PLA OR PLGA OR POLY(W) (GLYCOL? CO LACT?) OR POLYCAPROLACT?)

=> s l13 and (drug delivery)

3 FILES SEARCHED...

L14 25 L13 AND (DRUG DELIVERY)

=> s l14 and collagen and gelatin

L15 19 L14 AND COLLAGEN AND GELATIN

=> d l15 1-19 ibib abs

L15 ANSWER 1 OF 19 USPATFULL on STN

ACCESSION NUMBER: 2004:113659 USPATFULL

TITLE: Delivery of therapeutic biologicals from  
**implantable** tissue matrices

INVENTOR(S): MacLaughlin, David T., Saugus, MA, UNITED STATES  
 Vacanti, Joseph P., Winchester, MA, UNITED STATES  
 Donahoe, Patricia K., Boston, MA, UNITED STATES  
 Masiakos, Peter T., Boston, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004086497	A1	20040506
APPLICATION INFO.:	US 2003-690077	A1	20031021 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2001-770339, filed on 26 Jan 2001, GRANTED, Pat. No. US 6692738		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-178842P	20000127 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FROMMER LAWRENCE & HAUG, 745 FIFTH AVENUE- 10TH FL., NEW YORK, NY, 10151	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	1458	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

AB Normal cells, such as fibroblasts or other tissue or organ cell types, are genetically engineered to express biologically active, therapeutic agents, such as proteins that are normally produced in small amounts, for example, MIS, or other members of the TGF-beta family Herceptin.TM., interferons, and anti-angiogenic factors. These cells are seeded into a matrix for **implantation** into the patient to be treated. Cells may also be engineered to include a lethal gene, so that **implanted** cells can be destroyed once treatment is completed. Cells can be **implanted** in a variety of different matrices. In a preferred embodiment, these matrices are **implantable** and **biodegradable** over a period of time equal to or less than the expected period of treatment, when cells engraft to form a functional tissue producing the desired biologically active agent. **Implantation** may be ectopic or in some cases orthotopic. Representative cell types include tissue specific cells, progenitor cells, and stem cells. Matrices can be formed of synthetic or natural materials, by chemical coupling at the time of **implantation**, using standard techniques for formation of fibrous matrices from polymeric fibers, and using micromachining or microfabrication techniques. These devices and strategies are used as delivery systems via standard or minimally invasive **implantation** techniques for any number of parenterally deliverable recombinant proteins, particularly those that are difficult to produce in large amounts and/or active forms using conventional methods of purification, for the treatment of a variety of conditions that produce abnormal growth, including treatment of malignant and benign neoplasias, vascular malformations (hemangiomas), inflammatory conditions, keloid formation, abdominal or plural adhesions, endometriosis, congenital or endocrine abnormalities, and other conditions that can produce abnormal growth such as infection. Efficacy of treatment with the therapeutic biologicals is detected by determining specific criteria, for example, cessation of cell proliferation, regression of abnormal tissue, or cell death, or expression of genes or proteins reflecting the above.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 2 OF 19 USPATFULL on STN  
 ACCESSION NUMBER: 2004:50387 USPATFULL  
 TITLE: Electroprocessed **collagen** and tissue engineering  
 INVENTOR(S): Simpson, David G., Mechanicsville, VA, UNITED STATES  
 Bowlin, Gary L., Mechanicsville, VA, UNITED STATES  
 Wnek, Gary E., Midlothian, VA, UNITED STATES  
 Stevens, Peter J., Richland Hills, TX, UNITED STATES  
 Carr, Marcus E., Midlothian, VA, UNITED STATES  
 Matthews, Jamil A., Glen Allen, VA, UNITED STATES  
 Rajendran, Saravanamoorthy, East Haven, CT, UNITED STATES

NUMBER	KIND	DATE
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PATENT INFORMATION: US 2004037813 A1 20040226  
 APPLICATION INFO.: US 2003-447670 A1 20030528 (10)  
 RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-991373, filed  
 on 16 Nov 2001, PENDING Continuation-in-part of Ser.  
 No. US 2000-714255, filed on 17 Nov 2000, ABANDONED  
 Continuation-in-part of Ser. No. US 2000-512081, filed  
 on 24 Feb 2000, ABANDONED Continuation-in-part of Ser.  
 No. US 1999-386273, filed on 31 Aug 1999, GRANTED, Pat.  
 No. US 6592623

	NUMBER	DATE
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PRIORITY INFORMATION:	US 1999-121628P	19990225 (60)
	US 2002-384035P	20020528 (60)
	US 2002-386612P	20020606 (60)
	US 2002-396399P	20020715 (60)
	US 2002-402189P	20020808 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	JOHN S. PRATT, ESQ, KILPATRICK STOCKTON, LLP, 1100 PEACHTREE STREET, SUITE 2800, ATLANTA, GA, 30309	
NUMBER OF CLAIMS:	17	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	14 Drawing Page(s)	
LINE COUNT:	5697	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention is directed to formation and use of electroprocessed **collagen**, including use as an extracellular matrix and, together with cells, its use in forming engineered tissue. The engineered tissue can include the synthetic manufacture of specific organs or tissues which may be **implanted** into a recipient. The electroprocessed **collagen** may also be combined with other molecules in order to deliver substances to the site of application or **implantation** of the electroprocessed **collagen**. The **collagen** or **collagen**/cell suspension is electrodeposited onto a substrate to form tissues and organs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 3 OF 19 USPATFULL on STN

ACCESSION NUMBER: 2003:307233 USPATFULL  
 TITLE: Methods and compositions for articular repair  
 INVENTOR(S): Lang, Philipp, Lexington, MA, UNITED STATES  
 Steines, Daniel, Palo Alto, CA, UNITED STATES  
 Timsari, Bijan, San Diego, CA, UNITED STATES  
 Tsougarakis, Konstantinos, Mountain View, CA, UNITED STATES  
 Berez, Aaron, Menlo Park, CA, UNITED STATES  
 PATENT ASSIGNEE(S): Imaging Therapeutics, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
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PATENT INFORMATION:	US 2003216669	A1	20031120
APPLICATION INFO.:	US 2002-305652	A1	20021127 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2002-160667, filed on 28 May 2002, PENDING		

	NUMBER	DATE
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PRIORITY INFORMATION:	US 2001-293488P	20010525 (60)
	US 2002-363527P	20020312 (60)
	US 2002-380695P	20020514 (60)
	US 2002-380692P	20020514 (60)
DOCUMENT TYPE:	Utility	

FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: ROBINS & PASTERNAK, 1731 EMBARCADERO ROAD, SUITE 230,  
PALO ALTO, CA, 94303  
NUMBER OF CLAIMS: 39  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 33 Drawing Page(s)  
LINE COUNT: 2231  
AB Disclosed herein are methods and compositions for producing articular  
repair materials and for repairing an articular surface. In particular,  
methods for providing articular repair systems. Also provided are  
articular surface repair systems designed to replace a selected area  
cartilage, for example, and surgical tools for repairing articular  
surfaces.

L15 ANSWER 4 OF 19 USPATFULL on STN  
ACCESSION NUMBER: 2003:250624 USPATFULL  
TITLE: Method and apparatus for preparing biomimetic  
**scaffold**  
INVENTOR(S): Campbell, Phil G., Pittsburgh, PA, UNITED STATES  
Weiss, Lee E., Pittsburgh, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003175410	A1	20030918
APPLICATION INFO.:	US 2003-391458	A1	20030318 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-365451P	20020318 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BLVD, BOSTON, MA, 02110	
NUMBER OF CLAIMS:	115	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	15 Drawing Page(s)	
LINE COUNT:	3292	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods, compositions, and apparatus for preparing biomimetic  
**scaffolds** are provided. The methods, compositions, and apparatus  
are compatible with both in situ and external **scaffold**  
preparation. Also provided are methods for preparing **scaffolds**  
having 3-D spatial and/or temporal gradients of therapeutic compounds,  
such as, growth factors, antibiotics, immunosuppressants, analgesics,  
etc.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 5 OF 19 USPATFULL on STN  
ACCESSION NUMBER: 2003:112581 USPATFULL  
TITLE: Foam composite for the repair or regeneration of tissue  
INVENTOR(S): Vyakarnam, Murty N., New York, NY, UNITED STATES  
Zimmerman, Mark C., East Brunswick, NJ, UNITED STATES  
Scopelianos, Angelo George, Whitehouse Station, NJ,  
UNITED STATES  
Chun, Iksoo, Flemington, NJ, UNITED STATES  
Melican, Mora C., Bridgewater, NJ, UNITED STATES  
Bazilio, Clairene A., Plainfield, NJ, UNITED STATES  
Roller, Mark B., North Brunswick, NJ, UNITED STATES  
Gorky, David V., Flemington, NJ, UNITED STATES

NUMBER	KIND	DATE
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PATENT INFORMATION: US 2003077311 A1 20030424  
 APPLICATION INFO.: US 2001-938364 A1 20010824 (9)  
 RELATED APPLN. INFO.: Division of Ser. No. US 1999-469118, filed on 21 Dec 1999, GRANTED, Pat. No. US 6306424 Continuation-in-part of Ser. No. US 1999-345096, filed on 30 Jun 1999, GRANTED, Pat. No. US 6333029

DOCUMENT TYPE: Utility  
 FILE SEGMENT: APPLICATION  
 LEGAL REPRESENTATIVE: AUDLEY A. CIAMPORCERO JR., JOHNSON & JOHNSON, ONE JOHNSON & JOHNSON PLAZA, NEW BRUNSWICK, NJ, 08933-7003

NUMBER OF CLAIMS: 61  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 15 Drawing Page(s)  
 LINE COUNT: 2270

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present patent describes a biocompatible composite made of a first fibrous layer attached to a three-dimensional inter-connected open cell porous foams that have a gradient in composition and/or microstructure through one or more directions. These composites can be made from blends of absorbable and biocompatible polymers. These biocompatible composites are particularly well suited to tissue engineering applications and can be designed to mimic tissue transition or interface zones.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 6 OF 19 USPATFULL on STN  
 ACCESSION NUMBER: 2003:85859 USPATFULL  
 TITLE: Medical device  
 INVENTOR(S): Lahtinen, Mika, Uppsala, SWEDEN

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003059463	A1	20030327
APPLICATION INFO.:	US 2002-149013	A1	20020924 (10)
	WO 2000-SE2460		20001207

	NUMBER	DATE
PRIORITY INFORMATION:	SE 1999-4454	19991207
	SE 1999-4747	19991223
	SE 2000-285	20000131

DOCUMENT TYPE: Utility  
 FILE SEGMENT: APPLICATION  
 LEGAL REPRESENTATIVE: BURNS DOANE SWECKER & MATHIS L L P, POST OFFICE BOX 1404, ALEXANDRIA, VA, 22313-1404

NUMBER OF CLAIMS: 37  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 3 Drawing Page(s)  
 LINE COUNT: 3732

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a medical device with improved biological properties for an at least partial contact with blood, bodily fluids and/or tissues when introduced in a mammalian body, which device comprises a core and a nucleic acid present in a biologically compatible medium. Said nucleic acid encodes a translation or transcription product, which is capable of promoting endothelialisation in vivo at least partially on a synthetic surface of said core. The present invention also relates to a method of producing a medical device according to the invention. Further, the present invention also relates to a method of improving a mammalian, preferably human, body's biocompatibility with a synthetic surface, which method comprises introducing a device according to the invention in the body with an at least partial contact with blood, bodily fluids and/or tissues and



administering a nucleic acid present in a biologically compatible medium to the surroundings thereof. Said nucleic acid encodes a translation or transcription product capable of promoting endothelialisation in vivo at least partially on said synthetic surface. The administration of nucleic acid may in alternative embodiments be performed before, simultaneously as or after the introduction of the device in a body. In addition, combinations of these embodiments are also encompassed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 7 OF 19 USPATFULL on STN

ACCESSION NUMBER: 2003:74154 USPATFULL

TITLE: Porous tissue **scaffoldings** for the repair or regeneration of tissue

INVENTOR(S): Vyakarnam, Murty N., Edison, NJ, United States  
Zimmerman, Mark C., East Brunswick, NJ, United States  
Scopelianos, Angelo George, Whitehouse Station, NJ, United States  
Roller, Mark B., North Brunswick, NJ, United States  
Gorky, David V., Flemington, NJ, United States  
PATENT ASSIGNEE(S): Ethicon, Inc., Somerville, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6534084	B1	20030318
APPLICATION INFO.:	US 2000-740289		20001219 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1999-345096, filed on 30 Jun 1999		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Acquah, Samuel A.		
NUMBER OF CLAIMS:	36		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	15 Drawing Figure(s); 14 Drawing Page(s)		
LINE COUNT:	1923		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present patent describes a three-dimensional inter-connected open cell **porous** foams that have a gradient in composition and/or microstructure through one or more directions. These foams can be made from a blend of absorbable and biocompatible polymers that are formed into foams having a compositional gradient transitioning from predominately one polymeric material to predominately a second polymeric material. These gradient foams are particularly well suited to tissue engineering applications and can be designed to mimic tissue transition or interface zones.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 8 OF 19 USPATFULL on STN

ACCESSION NUMBER: 2002:283006 USPATFULL

TITLE: Three-dimensional **polymer** matrices

INVENTOR(S): Shastri, Venkatram R., Allston, MA, United States  
Martin, Ivan, Somerville, MA, United States  
Langer, Robert S., Newton, MA, United States  
Seidel, Joachim, Somerville, MA, United States  
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, Cambridge, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6471993	B1	20021029
	WO 9909149		19990225
APPLICATION INFO.:	US 2000-463709		20000128 (9)

WO 1998-US16020 19980731  
20000929 PCT 371 date  
RELATED APPLN. INFO.: Continuation of Ser. No. US 1997-904780, filed on 1 Aug  
1997, now abandoned

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-67234P	19971202 (60)
	US 1997-69547P	19971212 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Page, Thurman K.	
ASSISTANT EXAMINER:	Di Nola-Baron, Liliana	
LEGAL REPRESENTATIVE:	Clark & Elbing LLP, Bieker-Brady, Kristina	
NUMBER OF CLAIMS:	29	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	36 Drawing Figure(s); 19 Drawing Page(s)	
LINE COUNT:	2094	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Matrices that include a macrostructure having a semi-solid network and voids, and a microstructure having voids, in which the microstructure is located within the semi-solid network are disclosed. Methods for preparing these matrices are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 9 OF 19 USPATFULL on STN

ACCESSION NUMBER: 2002:171976 USPATFULL  
TITLE: Electroprocessed **collagen**  
INVENTOR(S): Simpson, David G., Mechanicsville, VA, UNITED STATES  
Bowlm, Gary L., Mechanicsville, VA, UNITED STATES  
Wnek, Gary E., Midlothian, VA, UNITED STATES  
Stevens, Peter J., N. Richland Hills, TX, UNITED STATES  
Carr, Marcus E., Midlothian, VA, UNITED STATES  
Matthews, Jamil A., Glen Allen, VA, UNITED STATES  
Rajendran, Saravanamoorthy, Branford, CT, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002090725	A1	20020711
APPLICATION INFO.:	US 2001-991373	A1	20011116 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-714255, filed on 17 Nov 2000, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-270118P	20010222 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	JOHN S. PRATT, ESQ, KILPATRICK STOCKTON, LLP, 1100 PEACHTREE STREET, SUITE 2800, ATLANTA, GA, 30309	
NUMBER OF CLAIMS:	24	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Page(s)	
LINE COUNT:	4536	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention is directed to formation and use of electroprocessed **collagen**, including use as an extracellular matrix and, together with cells, its use in forming engineered tissue. The engineered tissue can include the synthetic manufacture of specific organs or tissues which may be **implanted** into a recipient. The electroprocessed **collagen** may also be combined with other molecules in order to deliver substances to the site of application or **implantation** of the electroprocessed **collagen**. The **collagen** or

collagen/cell suspension is electrodeposited onto a substrate to form tissues and organs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 10 OF 19 USPATFULL on STN

ACCESSION NUMBER: 2002:54341 USPATFULL

TITLE: Delivery of therapeutic biologicals from  
**implantable** tissue matrices

INVENTOR(S): MacLaughlin, David T., Saugus, MA, UNITED STATES  
Vacanti, Joseph P., Winchester, MA, UNITED STATES  
Donahoe, Patricia K., Boston, MA, UNITED STATES  
Masiakos, Peter T., Boston, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002031500	A1	20020314
	US 6692738	B2	20040217
APPLICATION INFO.:	US 2001-770339	A1	20010126 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-178842P	20000127 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Patrea L. Pabst, Arnall Golden & Gregory, LLP, 2800 One Atlantic Center, 1201 West Peachtree Street, Atlanta, GA, 30309-3450	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	1457	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Normal cells, such as fibroblasts or other tissue or organ cell types, are genetically engineered to express biologically active, therapeutic agents, such as proteins that are normally produced in small amounts, for example, MIS, or other members of the TGF-beta family Herceptin.TM., interferons, and anti-angiogenic factors. These cells are seeded into a matrix for **implantation** into the patient to be treated. Cells may also be engineered to include a lethal gene, so that **implanted** cells can be destroyed once treatment is completed. Cells can be **implanted** in a variety of different matrices. In a preferred embodiment, these matrices are **implantable** and **biodegradable** over a period of time equal to or less than the expected period of treatment, when cells engraft to form a functional tissue producing the desired biologically active agent. **Implantation** may be ectopic or in some cases orthotopic. Representative cell types include tissue specific cells, progenitor cells, and stem cells. Matrices can be formed of synthetic or natural materials, by chemical coupling at the time of **implantation**, using standard techniques for formation of fibrous matrices from polymeric fibers, and using micromachining or microfabrication techniques. These devices and strategies are used as delivery systems via standard or minimally invasive **implantation** techniques for any number of parenterally deliverable recombinant proteins, particularly those that are difficult to produce in large amounts and/or active forms using conventional methods of purification, for the treatment of a variety of conditions that produce abnormal growth, including treatment of malignant and benign neoplasias, vascular malformations (hemangiomas), inflammatory conditions, keloid formation, abdominal or plural adhesions, endometriosis, congenital or endocrine abnormalities, and other conditions that can produce abnormal growth such as infection. Efficacy of treatment with the therapeutic biologicals is detected by determining specific criteria, for example,

cessation of cell proliferation, regression of abnormal tissue, or cell death, or expression of genes or proteins reflecting the above.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 11 OF 19 USPATFULL on STN

ACCESSION NUMBER: 2002:37872 USPATFULL

TITLE: Delivery of thrombospondin from **implantable** tissue matrices

INVENTOR(S): Detmar, Michael, Arlington, MA, UNITED STATES  
Vacanti, Joseph P., Winchester, MA, UNITED STATES  
Streit, Michael, Boston, MA, UNITED STATES  
Stephen, Antonia E., Boston, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002022592	A1	20020221
APPLICATION INFO.:	US 2001-822161	A1	20010330 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-536087, filed on 24 Mar 2000, PENDING Continuation-in-part of Ser. No. US 2001-770339, filed on 26 Jan 2001, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-127221P	19990331 (60)
	US 2000-178842P	20000127 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	PATREA L. PABST, HOLLAND & KNIGHT LLP, SUITE 2000, ONE ATLANTIC CENTER, 1201 WEST PEACHTREE STREET, N.E., ATLANTA, GA, 30309-3400	
NUMBER OF CLAIMS:	15	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	1352	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Normal cells, such as fibroblasts or other tissue or organ cell types, are genetically engineered to express biologically active, anti-angiogenic compounds, in particular, thrombospondin-2. These cells are seeded into a matrix for **implantation** into the patient to be treated. Cells may also be engineered to include a lethal gene, so that **implanted** cells can be destroyed once treatment is completed. Cells can be **implanted** in a variety of different matrices. In a preferred embodiment, these matrices are **implantable** and **biodegradable** over a period of time equal to or less than the expected period of treatment, during which the engrafted cells form a functional tissue producing the desired biologically active agent for longer periods of time. These devices and strategies are used as delivery systems, which may be **implanted** by standard or minimally invasive **implantation** techniques, for delivery of anti-angiogenic molecules, especially thrombospondin-2, for the treatment of a variety of conditions that produce abnormal growth, including treatment of malignant and benign neoplasias, vascular malformations (hemangiomas), inflammatory conditions, keloid formation and adhesion, endometriosis, congenital or endocrine abnormalities, and other conditions that can produce abnormal growth such as infection.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 12 OF 19 USPATFULL on STN

ACCESSION NUMBER: 2001:234972 USPATFULL

TITLE: **Porous** tissue **scaffoldings** for the repair of regeneration of tissue

INVENTOR(S): Vyakarnam, Murty N., Edison, NJ, United States

PATENT ASSIGNEE(S): Zimmerman, Mark C., East Brunswick, NJ, United States  
 Scopelianos, Angelo George, Whitehouse Station, NJ, United States  
 Roller, Mark B., North Brunswick, NJ, United States  
 Gorky, David V., Flemington, NJ, United States  
 Ethicon, Inc., Somerville, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6333029	B1	20011225
APPLICATION INFO.:	US 1999-345096		19990630 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Acquah, Samuel A.		
NUMBER OF CLAIMS:	75		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	15 Drawing Figure(s); 14 Drawing Page(s)		
LINE COUNT:	2097		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present patent describes a three-dimensional inter-connected open cell **porous** foams that have a gradient in composition and/or microstructure through one or more directions. These foams can be made from a blend of absorbable and biocompatible polymers that are formed into foams having a compositional gradient transitioning from predominately one polymeric material to predominately a second polymeric material. These gradient foams are particularly well suited to tissue engineering applications and can be designed to mimic tissue transition or interface zones.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 13 OF 19 USPATFULL on STN  
 ACCESSION NUMBER: 2001:188227 USPATFULL  
 TITLE: **Porous tissue scaffoldings** for the repair or regeneration of tissue  
 INVENTOR(S): Vyakarnam, Murty N., Edison, NJ, United States  
 Zimmerman, Mark C., East Brunswick, NJ, United States  
 Scopelianos, Angelo George, Whitehouse Station, NJ, United States  
 Roller, Mark B., North Brunswick, NJ, United States  
 Gorky, David V., Flemington, NJ, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001033857	A1	20011025
	US 6365149	B2	20020402
APPLICATION INFO.:	US 2000-740086	A1	20001219 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1999-345096, filed on 30 Jun 1999, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	Philip S. Johnson, Esq., Johnson & Johnson, One Johnson & Johnson Plaza, New Brunswick, NJ, 08933-7003		
NUMBER OF CLAIMS:	126		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	14 Drawing Page(s)		
LINE COUNT:	2320		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present patent describes a three-dimensional **interconnected** open cell **porous** foams that have a gradient in composition and/or microstructure through one or more directions. These foams can be made from a blend of absorbable and biocompatible polymers that are formed into foams having a compositional gradient transitioning from

predominately one polymeric material to predominately a second polymeric material. These gradient foams are particularly well suited to tissue engineering applications and can be designed to mimic tissue transition or interface zones.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 14 OF 19 USPATFULL on STN

ACCESSION NUMBER: 2001:184869 USPATFULL  
TITLE: Foam composite for the repair or regeneration of tissue  
INVENTOR(S): Vyakarnam, Murty N., New York, NY, United States  
Zimmerman, Mark C., East Brunswick, NJ, United States  
Scopelianos, Angelo George, Whitehouse Station, NJ, United States  
Chun, Iksoo, Flemington, NJ, United States  
Melican, Mora C., Bridgewater, NJ, United States  
Bazilio, Clairene A., Plainfield, NJ, United States  
Roller, Mark B., North Brunswick, NJ, United States  
Gorky, David V., Flemington, NJ, United States  
PATENT ASSIGNEE(S): Ethicon, Inc., Somerville, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6306424	B1	20011023
APPLICATION INFO.:	US 1999-469118		19991221 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1999-345096, filed on 30 Jun 1999		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Acquah, Samuel A.		
NUMBER OF CLAIMS:	39		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	17 Drawing Figure(s); 15 Drawing Page(s)		
LINE COUNT:	2151		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present patent describes a biocompatible composite made of a first fibrous layer attached to a three-dimensional inter-connected open cell porous foams that have a gradient in composition and/or microstructure through one or more directions. These composites can be made from blends of absorbable and biocompatible polymers. These biocompatible composites are particularly well suited to tissue engineering applications and can be designed to mimic tissue transition or interface zones.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 15 OF 19 EUROPATFULL COPYRIGHT 2004 WILA on STN

GRANTED PATENT - ERTEILTES PATENT - BREVET DELIVRE

ACCESSION NUMBER: 1235536 EUROPATFULL EW 200326 FS PS  
TITLE: MEDICAL DEVICE comprising a synthetic surface having nucleic acid for in vivo induction of its endothelialisation.  
MEDIZINISCHE VORRICHTUNG mit nukleinsaeurehaltiger synthetischer Oberflaeche zur in-vivo Induktion seiner Endothelialisierung.  
DISPOSITIF MEDICAL avec une surface comprenant un acide nucleique pour induire in-vivo l'endothelialisation.  
INVENTOR(S): Lahtinen, Mika, DoebeInsgatan 2B, 752 37 Uppsala, SE  
PATENT ASSIGNEE(S): Xenerate AB, Uppsala Science Park, 751 83 Uppsala, SE  
PATENT ASSIGNEE NO: 4267190  
AGENT: Dahner, Christer et al., Stroem & Gulliksson IP AB, Box

6720, 113 85 Stockholm, SE

AGENT NUMBER: 87303

OTHER SOURCE: MEPB2003036 EP 1235536 B1 0049

SOURCE: Wila-EPS-2003-H26-T2

DOCUMENT TYPE: Patent

LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch

DESIGNATED STATES: R AT; R BE; R CH; R CY; R DE; R DK; R ES; R FI; R FR; R GB; R GR; R IE; R IT; R LI; R LU; R MC; R NL; R PT; R SE; R TR

PATENT INFO.PUB.TYPE: EPB1 EUROPAEISCHE PATENTSCHRIFT (Internationale Anmeldung)

PATENT INFORMATION:

	PATENT NO	KIND DATE
	EP 1235536	B1 20030625
'OFFENLEGUNGS' DATE:		20020904
APPLICATION INFO.:	EP 2000-986137	20001207
PRIORITY APPLN. INFO.:	SE 1999-4454	19991207
	SE 1999-4747	19991223
	SE 2000-285	20000131
RELATED DOC. INFO.:	WO 00-SE2460	001207 INTAKZ
	WO 01041674	010614 INTPNR
REFERENCE PAT. INFO.:	WO 99-55315 A1	WO 98-20027 A2
REF. NON-PATENT-LIT.:	ERIC VAN BELLE ET AL.: 'Passivation of metallic stents after arterial gene transfer of phVEGF165 inhibits thrombus formation and intimal thickening' J. AM. COLL. CARDIOL. vol. 29, no. 6, May 1997, pages 1371 - 1379, XP002937216	

L15 ANSWER 16 OF 19 EUROPATFULL COPYRIGHT 2004 WILA on STN

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 1234587 EUROPATFULL EW 200235 FS OS

TITLE: Biocompatible foam composite.  
Biovertraeglicher Verbundschaum.  
Mousse composite biocompatible.

INVENTOR(S): Vyakarnam, Murty N., 529 West 111th St. Apt. 42, NY 10025, US;  
Zimmerman, Mark C., 21 Agate Road, East Brunswick, NJ 08816, US;  
Scopelianos, Angelo George, 7 John Stevens Rd., Whitehouse Station, NJ 08889, US;  
Melican, Mora C., 2701 Johnson Circle, Bridgewater, NJ 08807, US;  
Bazilio, Clairene A., 82 Deborah Court, Plainfield, NJ 07062, US;  
Roller, Mark B., 9 Quince Place, North Brunswick, NJ 08902, US;  
Gorky, David V., 18 Copper Penny Rd., Flemington, NJ 08822, US;  
Chun, Iksoo, 253 Spruce Court, Flemington, NJ 08822, US

PATENT ASSIGNEE(S): ETHICON, INC., U.S. Route 22, Somerville New Jersey 08876, US

PATENT ASSIGNEE NO: 291330

AGENT: Mercer, Christopher Paul et al., Carpmiels & Ransford 43, Bloomsbury Square, London WC1A 2RA, GB

AGENT NUMBER: 46611

OTHER SOURCE: BEPA2002072 EP 1234587 A1 0048

SOURCE: Wila-EPZ-2002-H35-T1b

DOCUMENT TYPE: Patent

LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch

DESIGNATED STATES: R AT; R BE; R CH; R CY; R DE; R DK; R ES; R FI; R FR; R GB; R GR; R IE; R IT; R LI; R LU; R MC; R NL; R PT; R

PATENT INFO.PUB.TYPE: SE; R TR; R AL; R LT; R LV; R MK; R RO; R SI  
PATENT INFORMATION: EPA1 EUROPÄISCHE PATENTANMELDUNG

	PATENT NO	KIND DATE
	EP 1234587	A1 20020828
'OFFENLEGUNGS' DATE:		20020828
APPLICATION INFO.:	EP 2001-301703	20010226

L15 ANSWER 17 OF 19 EUROPATFULL COPYRIGHT 2004 WILA on STN

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 1064958 EUROPATFULL EW 200101 FS OS

TITLE: **Porous tissue scaffoldings** for the repair or regeneration of tissue.  
Porooses Stuetzgewebe zur Gewebewiederherstellung oder -regeneration.

Matieres pour l'echafaudage tissulaires poreux et la reparation ou regeneration de tissu.  
INVENTOR(S): Vyakarnam, Murty N., 2420 Forest Haven Blvd., Edison, NJ 08817, US;  
Zimmerman, Mark C., 21 Agate Road, East Brunswick, NJ 08816, US;  
Scopelianos, Angelo George, 7 John Stevens Road, Whitehouse Station, NJ 08889, US;  
Roller, Mark B., 9 Quince Place, North Brunswick, NJ 08902, US;  
Gorky, David V., 18 Copper Penny Road, Flemington, NJ 08822, US

PATENT ASSIGNEE(S): ETHICON, INC., U.S. Route 22 West, Somerville, N J 08876, US

PATENT ASSIGNEE NO: 291335

AGENT: Mercer, Christopher Paul, Carpmaels & Ransford 43, Bloomsbury Square, London WC1A 2RA, GB

AGENT NUMBER: 46611

OTHER SOURCE: BEPA2001002 EP 1064958 A1 0039

SOURCE: Wila-EPZ-2001-H01-T1b

DOCUMENT TYPE: Patent

LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch

DESIGNATED STATES: R AT; R BE; R CH; R CY; R DE; R DK; R ES; R FI; R FR; R GB; R GR; R IE; R IT; R LI; R LU; R MC; R NL; R PT; R SE; R AL; R LT; R LV; R MK; R RO; R SI

PATENT INFO.PUB.TYPE: EPA1 EUROPÄISCHE PATENTANMELDUNG

	PATENT NO	KIND DATE
	EP 1064958	A1 20010103
'OFFENLEGUNGS' DATE:		20010103
APPLICATION INFO.:	EP 2000-305501	20000630
PRIORITY APPLN. INFO.:	US 1999-345096	19990630
	US 1999-469118	19991221

L15 ANSWER 18 OF 19 EUROPATFULL COPYRIGHT 2004 WILA on STN

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 997115 EUROPATFULL EW 200018 FS OS

TITLE: Self-expandable stent and stent-graft and method of using them.  
Selbstausdehnbarer Stent und Stenttransplantat und Verfahren zu ihrer Verwendung.  
Extenseur et greffe a extenseur autodeployables et methode pour les utiliser.



INVENTOR(S): Lau, Lilip, 1132 S Sage Court, Sunnyvale, CA 94087, US;  
Maroney, Charles T., 30 Kiowa Court, Portola Valley, CA 94208, US;  
Hartigan, William M., 4547 Renato Court, Fremont, CA 94537, US;  
Lam, Sharon, 1072 Wilmington Avenue, San Jose, CA 95129, US;  
McCullough, Kimberley A., 29858 Clearbrook Circle, Nr. 124, Hayward, CA 94544, US;  
Rhee, Woonza, 3845 La Donna Avenue, Palo Alto, CA 94306, US

PATENT ASSIGNEE(S): Prograft Medical, Inc., 2500 Faber Place, Palo Alto, CA 94303, US

PATENT ASSIGNEE NO: 2045490

AGENT: Horner, Martin Grenville et al., Cruikshank & Fairweather 19 Royal Exchange Square, Glasgow G1 3AE Scotland, GB

AGENT NUMBER: 45941

OTHER SOURCE: BEPA2000033 EP 0997115 A2 0049

SOURCE: Wila-EPZ-2000-H18-T2b

DOCUMENT TYPE: Patent

LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch

DESIGNATED STATES: R AT; R BE; R CH; R DE; R DK; R ES; R FR; R GB; R GR; R IE; R IT; R LI; R LU; R MC; R NL; R PT; R SE

PATENT INFO.PUB.TYPE: EPA2 EUROPÄISCHE PATENTANMELDUNG

PATENT INFORMATION:

PATENT NO	KIND	DATE
EP 997115	A2	20000503
		20000503
EP 2000-101667		19950403
US 1994-222263		19940401
US 1994-221815		19940401
US 1994-299190		19940831
US 1994-303060		19940908
US 1994-344158		19941123
US 1994-361793		19941221
US 1995-374474		19950114
US 1995-411441		19950328
US 1995-411443		19950328
US 1995-411452		19950328

RELATED DOC. INFO.: EP 754016 DIV

GRANTED PATENT - ERTEILTES PATENT - BREVET DELIVRE

ACCESSION NUMBER: 997115 EUROPATFULL EW 200344 FS PS

TITLE: Self-expandable stent and stent-graft and method of preparing them.  
Selbstausdehnbarer Stent bzw. Stenttransplantat und Verfahren zu ihrer Vorbereitung.  
Extenseur et greffe a extenseur autodeployables et methode pour les preparer.

INVENTOR(S): Lau, Lilip, 1132 S Sage Court, Sunnyvale, CA 94087, US;  
Maroney, Charles T., 30 Kiowa Court, Portola Valley, CA 94208, US;  
Hartigan, William M., 4547 Renato Court, Fremont, CA 94537, US;  
Lam, Sharon, 1072 Wilmington Avenue, San Jose, CA 95129, US;  
McCullough, Kimberley A., 29858 Clearbrook Circle, Nr. 124, Hayward, CA 94544, US;  
Rhee, Woonza, 3845 La Donna Avenue, Palo Alto, CA 94306, US

PATENT ASSIGNEE(S): Prograft Medical, Inc., 2500 Faber Place, Palo Alto, CA

94303, US  
 PATENT ASSIGNEE NO: 2045490  
 AGENT: Horner, Martin Grenville et al., Cruikshank &  
 Fairweather 19 Royal Exchange Square, Glasgow G1 3AE  
 Scotland, GB  
 AGENT NUMBER: 45941  
 OTHER SOURCE: MEPB2003055 EP 0997115 B1 0053  
 SOURCE: Wila-EPS-2003-H44-T2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch  
 DESIGNATED STATES: R AT; R BE; R CH; R DE; R DK; R ES; R FR; R GB; R GR; R  
 IE; R IT; R LI; R LU; R MC; R NL; R PT; R SE  
 PATENT INFO.PUB.TYPE: EPB1 EUROPAEISCHE PATENTSCHRIFT  
 PATENT INFORMATION:

	PATENT NO	KIND	DATE
	-----		
	EP 997115	B1	20031029
'OFFENLEGUNGS' DATE:			20000503
APPLICATION INFO.:	EP 2000-101667		19950403
PRIORITY APPLN. INFO.:	US 1994-221815		19940401
	US 1994-222263		19940401
	US 1994-299190		19940831
	US 1994-303060		19940908
	US 1994-344158		19941123
	US 1994-361793		19941221
	US 1995-374474		19950114
	US 1995-411441		19950328
	US 1995-411443		19950328
	US 1995-411452		19950328
RELATED DOC. INFO.:	EP 754016	DIV	
REFERENCE PAT. INFO.:	EP 382014 A		US 4300244 A
	US 5290305 A		

L15 ANSWER 19 OF 19 EUROPATFULL COPYRIGHT 2004 WILA on STN

GRANTED PATENT - ERTEILTES PATENT - BREVET DELIVRE

ACCESSION NUMBER: 754016 EUROPATFULL EW 200328 FS PS  
 TITLE: SELF-EXPANDABLE STENT AND STENT-GRAFT.  
 SELBSTAUSDEHNBARER STENT UND STENT-GRAFT TRANSPLANTAT.  
 EXTENSEUR ET GREFFE A EXTENSEUR AUTODEPLOYABLES.  
 INVENTOR(S): LAU, Lilip, 1132 S. Sage Court, Sunnyvale, CA 94087, US;  
 MARONEY, Charles, T., 30 Kiowa Court, Portola Valley, CA  
 94028, US;  
 HARTIGAN, William, M., 4547 Renato Court, Fremont, CA  
 94537, US;  
 LAM, Sharon, 1072 Wilmington Avenue, San Jose, CA 95129,  
 US;  
 MCCULLOUGH, Kimberly, A., 29858 Clearbrook Circle 124,  
 Hayward, CA 94544, US;  
 RHEE, Woonza, 3845 LaDonna Avenue, Palo Alto, CA 94306,  
 US  
 PATENT ASSIGNEE(S): Prograft Medical, Inc., 2500 Faber Place, Palo Alto, CA  
 94303, US  
 PATENT ASSIGNEE NO: 2045490  
 AGENT: Shanks, Andrew et al., Cruikshank & Fairweather, 19  
 Royal Exchange Square, Glasgow G1 3AE, GB  
 AGENT NUMBER: 74561  
 OTHER SOURCE: MEPB2003038 EP 0754016 B1 0039  
 SOURCE: Wila-EPS-2003-H28-T2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch  
 DESIGNATED STATES: R AT; R BE; R CH; R DE; R DK; R ES; R FR; R GB; R GR; R  
 IE; R IT; R LI; R LU; R MC; R NL; R PT; R SE

PATENT INFO.PUB.TYPE: EPB1 EUROPÄISCHE PATENTSCHRIFT (Internationale  
Anmeldung)

PATENT INFORMATION:

	PATENT NO	KIND	DATE
	EP 754016	B1	20030709
'OFFENLEGUNGS' DATE:			19970122
APPLICATION INFO.:	EP 1995-916920		19950403
PRIORITY APPLN. INFO.:	US 1994-221815		19940401
	US 1994-222263		19940401
	US 1994-299190		19940831
	US 1994-303060		19940908
	US 1994-344158		19941123
	US 1994-361793		19941221
	US 1995-374474		19950114
	US 1995-411441		19950328
	US 1995-411443		19950328
	US 1995-411452		19950328
RELATED DOC. INFO.:	WO 95-US4000	950403	INTAKZ
	WO 95026695	951012	INTPNR
REFERENCE PAT. INFO.:	EP 540290 A	EP 556850	A
	EP 565251 A	WO 92-06734	A
	WO 93-13825 A	WO 94-00179	A
	US 4994071 A	US 5100429	A
	US 5122154 A	US 5133732	A
	US 5195984 A		

PATENT ASSIGNEE(S): Lai, Huey-Min, Hsinchu, TAIWAN, PROVINCE OF CHINA  
Industrial Technology Research Institute, Hsinchu,  
TAIWAN, PROVINCE OF CHINA (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003072790	A1	20030417
APPLICATION INFO.:	US 2001-982565	A1	20011016 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	DARBY & DARBY P.C., 805 Third Avenue, New York, NY, 10022		
NUMBER OF CLAIMS:	18		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	3 Drawing Page(s)		
LINE COUNT:	343		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A **biodegradable porous** device for tissue engineering is disclosed, which comprises (A) a **porous polymeric scaffold** comprising a **co-continuous** phase of a first **biodegradable polymer** and a second **biodegradable polymer** which are **incompatible** with each other, wherein the first **biodegradable polymer** contains a **continuous** network of large, **interconnected pores**, and the second **biodegradable polymer** contains small, partially **interconnected pores**; (B) a **biodegradable polymer fiber** dispersed in, and compatible with the matrix of the first **biodegradable polymer**; and optionally (C) an active ingredient provided in the polymeric **scaffold**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 6 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2002:283006 USPATFULL  
TITLE: Three-dimensional **polymer** matrices  
INVENTOR(S): Shastri, Venkatram R., Allston, MA, United States  
Martin, Ivan, Somerville, MA, United States  
Langer, Robert S., Newton, MA, United States  
Seidel, Joachim, Somerville, MA, United States  
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, Cambridge, MA,  
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US <u>6471993</u>	B1	20021029
	WO <del>9909149</del>		19990225
APPLICATION INFO.:	US 2000-463709		20000128 (9)
	WO 1998-US16020		19980731
			20000929 PCT 371 date
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1997-904780, filed on 1 Aug 1997, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-67234P	19971202 (60)
	US 1997-69547P	19971212 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Page, Thurman K.	
ASSISTANT EXAMINER:	Di Nola-Baron, Liliana	
LEGAL REPRESENTATIVE:	Clark & Elbing LLP, Bieker-Brady, Kristina	
NUMBER OF CLAIMS:	29	

PATENT INFORMATION: US 6306424 B1 20011023  
APPLICATION INFO.: US 1999-469118 19991221 (9)  
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-345096, filed  
on 30 Jun 1999  
DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Acquah, Samuel A.  
NUMBER OF CLAIMS: 39  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 17 Drawing Figure(s); 15 Drawing Page(s)  
LINE COUNT: 2151

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present patent describes a biocompatible composite made of a first fibrous layer attached to a three-dimensional inter-connected open cell porous foams that have a gradient in composition and/or microstructure through one or more directions. These composites can be made from blends of absorbable and biocompatible polymers. These biocompatible composites are particularly well suited to tissue engineering applications and can be designed to mimic tissue transition or interface zones.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 9 OF 9 EUROPATFULL COPYRIGHT 2004 WILA on STN

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 1234587 EUROPATFULL EW 200235 FS OS  
TITLE: Biocompatible foam composite.  
Biovertraeglicher Verbundschaum.  
Mousse composite biocompatible.  
INVENTOR(S): Vyakarnam, Murty N., 529 West 111th St. Apt. 42, NY  
10025, US;  
Zimmerman, Mark C., 21 Agate Road, East Brunswick, NJ  
08816, US;  
Scopelianos, Angelo George, 7 John Stevens Rd.,  
Whitehouse Station, NJ 08889, US;  
Melican, Mora C., 2701 Johnson Circle, Bridgewater, NJ  
08807, US;  
Bazilio, Clairene A., 82 Deborah Court, Plainfield, NJ  
07062, US;  
Roller, Mark B., 9 Quince Place, North Brunswick, NJ  
08902, US;  
Gorky, David V., 18 Copper Penny Rd., Flemington, NJ  
08822, US;  
Chun, Iksoo, 253 Spruce Court, Flemington, NJ 08822, US  
PATENT ASSIGNEE(S): ETHICON, INC., U.S. Route 22, Somerville New Jersey  
08876, US  
PATENT ASSIGNEE NO: 291330  
AGENT: Mercer, Christopher Paul et al., Carpmiels & Ransford  
43, Bloomsbury Square, London WC1A 2RA, GB  
AGENT NUMBER: 46611  
OTHER SOURCE: BEPA2002072 EP 1234587 A1 0048  
SOURCE: Wila-EPZ-2002-H35-T1b  
DOCUMENT TYPE: Patent  
LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch  
DESIGNATED STATES: R AT; R BE; R CH; R CY; R DE; R DK; R ES; R FI; R FR; R  
GB; R GR; R IE; R IT; R LI; R LU; R MC; R NL; R PT; R  
SE; R TR; R AL; R LT; R LV; R MK; R RO; R SI  
PATENT INFO.PUB.TYPE: EPA1 EUROPAEISCHE PATENTANMELDUNG  
PATENT INFORMATION:

PATENT NO	KIND DATE
EP 1234587	A1 20020828

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003114936	A1	20030619
APPLICATION INFO.:	US 2002- <del>207531</del>	A1	20020729 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1999-416346, filed on 12 Oct 1999, GRANTED, Pat. No. US 6454811		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-103853P	19981012 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	PATREA L. PABST, HOLLAND & KNIGHT LLP, SUITE 2000, ONE ATLANTIC CENTER, 1201 WEST PEACHTREE STREET, N.E., ATLANTA, GA, 30309-3400	
NUMBER OF CLAIMS:	41	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Page(s)	
LINE COUNT:	2846	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The devices disclosed herein are composite **implantable** devices having a gradient of one or more of the following: materials, macroarchitecture, microarchitecture, or mechanical properties, which can be used to select or promote attachment of specific cell types on and in the devices prior to and/or after **implantation**. In preferred embodiments, the **implants** include complex three-dimensional structure, including curved regions and saddle-shaped areas. In various embodiments, the gradient forms a transition zone in the device from a region composed of materials or having properties best suited for one type of tissue to a region composed of materials or having properties suited for a different type of tissue. Methods to improve these devices for use in repair or replacement of cartilage and/or bone have been developed, which specifically address 1) the selection of the appropriate polymeric material for the cartilage region, 2) mechanical testing of the bone region including the effect of **porosity** and **polymer**/calcium phosphate ratio, and 3) prevention of delamination in the transition region.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 4 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2003:112581 USPATFULL  
 TITLE: Foam composite for the repair or regeneration of tissue  
 INVENTOR(S): Vyakarnam, Murty N., New York, NY, UNITED STATES  
 Zimmerman, Mark C., East Brunswick, NJ, UNITED STATES  
 Scopelianos, Angelo George, Whitehouse Station, NJ, UNITED STATES  
 Chun, Iksoo, Flemington, NJ, UNITED STATES  
 Melican, Mora C., Bridgewater, NJ, UNITED STATES  
 Bazilio, Clairene A., Plainfield, NJ, UNITED STATES  
 Roller, Mark B., North Brunswick, NJ, UNITED STATES  
 Gorky, David V., Flemington, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003077311	A1	20030424
APPLICATION INFO.:	US 2001-938364	A1	20010824 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1999-469118, filed on 21 Dec 1999, GRANTED, Pat. No. US 6306424 Continuation-in-part of Ser. No. US 1999-345096, filed on 30 Jun 1999, GRANTED, Pat. No. US 6333029		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		

LEGAL REPRESENTATIVE: AUDLEY A. CIAMPORCERO JR., JOHNSON & JOHNSON, ONE  
JOHNSON & JOHNSON PLAZA, NEW BRUNSWICK, NJ, 08933-7003  
NUMBER OF CLAIMS: 61  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 15 Drawing Page(s)  
LINE COUNT: 2270

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present patent describes a biocompatible composite made of a first fibrous layer attached to a three-dimensional inter-connected open cell **porous** foams that have a gradient in composition and/or microstructure through one or more directions. These composites can be made from blends of absorbable and biocompatible polymers. These biocompatible composites are particularly well suited to tissue engineering applications and can be designed to mimic tissue transition or interface zones.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 5 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2003:105879 USPATFULL

TITLE: **Biodegradable porous** devices for tissue engineering

INVENTOR(S): Tsai, Chin-Chin, Taichung Hsien, TAIWAN, PROVINCE OF CHINA

Shih, Hsi-Hsin, Taichung, TAIWAN, PROVINCE OF CHINA

Lai, Huey-Min, Hsinchu, TAIWAN, PROVINCE OF CHINA

PATENT ASSIGNEE(S): Industrial Technology Research Institute, Hsinchu, TAIWAN, PROVINCE OF CHINA (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003072790	A1	20030417
APPLICATION INFO.:	US 2001-982565	A1	20011016 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	DARBY & DARBY P.C., 805 Third Avenue, New York, NY, 10022		
NUMBER OF CLAIMS:	18		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	3 Drawing Page(s)		
LINE COUNT:	343		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A **biodegradable porous** device for tissue engineering is disclosed, which comprises (A) a **porous** polymeric **scaffold** comprising a **co-continuous** phase of a first **biodegradable polymer** and a second **biodegradable polymer** which are **incompatible** with each other, wherein the first **biodegradable polymer** contains a **continuous** network of large, **interconnected pores**, and the second **biodegradable polymer** contains small, partially **interconnected pores**; (B) a **biodegradable polymer fiber** dispersed in, and compatible with the matrix of the first **biodegradable polymer**; and optionally (C) an active ingredient provided in the polymeric **scaffold**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 6 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2003:74154 USPATFULL

TITLE: **Porous tissue scaffoldings** for the repair or regeneration of tissue

INVENTOR(S): Vyakarnam, Murty N., Edison, NJ, United States

PATENT ASSIGNEE(S): Zimmerman, Mark C., East Brunswick, NJ, United States  
Scopelianos, Angelo George, Whitehouse Station, NJ,  
United States  
Roller, Mark B., North Brunswick, NJ, United States  
Gorky, David V., Flemington, NJ, United States  
Ethicon, Inc., Somerville, NJ, United States (U.S.  
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6534084	B1	20030318
APPLICATION INFO.:	US <del>2000-740289</del>		20001219 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1999-345096, filed on 30 Jun 1999		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Acquah, Samuel A.		
NUMBER OF CLAIMS:	36		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	15 Drawing Figure(s); 14 Drawing Page(s)		
LINE COUNT:	1923		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present patent describes a three-dimensional inter-connected open cell **porous** foams that have a gradient in composition and/or microstructure through one or more directions. These foams can be made from a blend of absorbable and biocompatible polymers that are formed into foams having a compositional gradient transitioning from predominately one polymeric material to predominately a second polymeric material. These gradient foams are particularly well suited to tissue engineering applications and can be designed to mimic tissue transition or interface zones.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 7 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2002:246177 USPATFULL  
TITLE: Composites for tissue regeneration and methods of manufacture thereof  
INVENTOR(S): Sherwood, Jill K., Princeton, NJ, United States  
Griffith, Linda G., Cambridge, MA, United States  
Brown, Scott, Princeton, NJ, United States  
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, Cambridge, MA,  
United States (U.S. corporation)  
Therics, Inc., Princeton, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US <del>6454811</del>	B1	20020924
APPLICATION INFO.:	US 1999-416346		19991012 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-103853P	19981012 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	McDermott, Corrine	
ASSISTANT EXAMINER:	Stewart, Alvin	
LEGAL REPRESENTATIVE:	Holland & Knight LLP	
NUMBER OF CLAIMS:	62	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	24 Drawing Figure(s); 4 Drawing Page(s)	
LINE COUNT:	2036	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.



CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 9 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2001:234972 USPATFULL

TITLE: **Porous tissue scaffoldings** for the repair of regeneration of tissue

INVENTOR(S): Vyakarnam, Murty N., Edison, NJ, United States  
Zimmerman, Mark C., East Brunswick, NJ, United States  
Scopelianos, Angelo George, Whitehouse Station, NJ, United States

Roller, Mark B., North Brunswick, NJ, United States  
Gorky, David V., Flemington, NJ, United States  
PATENT ASSIGNEE(S): Ethicon, Inc., Somerville, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6333029	B1	20011225
APPLICATION INFO.:	US 1999-345096		19990630 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Acquah, Samuel A.		
NUMBER OF CLAIMS:	75		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	15 Drawing Figure(s); 14 Drawing Page(s)		
LINE COUNT:	2097		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present patent describes a three-dimensional inter-connected open cell **porous** foams that have a gradient in composition and/or microstructure through one or more directions. These foams can be made from a blend of absorbable and biocompatible polymers that are formed into foams having a compositional gradient transitioning from predominately one polymeric material to predominately a second polymeric material. These gradient foams are particularly well suited to tissue engineering applications and can be designed to mimic tissue transition or interface zones.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 10 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2001:188227 USPATFULL

TITLE: **Porous tissue scaffoldings** for the repair or regeneration of tissue

INVENTOR(S): Vyakarnam, Murty N., Edison, NJ, United States  
Zimmerman, Mark C., East Brunswick, NJ, United States  
Scopelianos, Angelo George, Whitehouse Station, NJ, United States

Roller, Mark B., North Brunswick, NJ, United States  
Gorky, David V., Flemington, NJ, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001033857	A1	20011025
APPLICATION INFO.:	US 6365149	B2	20020402
RELATED APPLN. INFO.:	US 2000-740086	A1	20001219 (9)
	Division of Ser. No. US 1999-345096, filed on 30 Jun 1999, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	Philip S. Johnson, Esq., Johnson & Johnson, One Johnson & Johnson Plaza, New Brunswick, NJ, 08933-7003		
NUMBER OF CLAIMS:	126		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	14 Drawing Page(s)		